

CHAPTER 7025

MINNESOTA POLLUTION CONTROL AGENCY

LEAD PAINT REMOVAL

ABRASIVE BLASTING OF LEAD PAINT FROM RESIDENTIAL, CHILD CARE, AND SCHOOL BUILDINGS		7025.0260	POLLUTION CONTROL REQUIRED.
7025.0010	APPLICABILITY.	7025.0270	CLASS I BRIDGE.
7025.0020	DEFINITIONS.	7025.0280	CLASS II BRIDGE.
7025.0030	TESTING.	7025.0290	CLASS III BRIDGE.
7025.0040	NOTIFICATION.	7025.0300	CLASS IV BRIDGE.
7025.0050	CONTAINMENT.	CONDITIONS FOR LEAD PAINT REMOVAL FROM STORAGE STRUCTURES	
7025.0060	CLEANUP.	7025.0310	CLASSIFICATION OF STORAGE STRUCTURES.
7025.0070	RESTRICTIONS.	7025.0320	POLLUTION CONTROL REQUIRED.
7025.0080	VACUUM BLASTING.	7025.0330	CLASS I STORAGE STRUCTURE.
REMOVAL OF LEAD PAINT FROM STEEL STRUCTURES		7025.0340	CLASS II STORAGE STRUCTURE.
7025.0200	APPLICABILITY.	7025.0350	CLASS III STORAGE STRUCTURE.
7025.0210	DEFINITIONS.	CONDITIONS FOR LEAD PAINT REMOVAL FROM OTHER STEEL STRUCTURES	
7025.0220	COMPLIANCE.	7025.0360	POLLUTION CONTROL REQUIRED.
7025.0230	IDENTIFICATION OF LEAD IN PAINT.	7025.0370	LEAD PAINT REMOVAL REQUIREMENTS.
7025.0240	NOTIFICATION.	7025.0380	RESTRICTIONS.
CONDITIONS FOR LEAD PAINT REMOVAL FROM BRIDGES			
7025.0250	CLASSIFICATION OF BRIDGES.		

ABRASIVE BLASTING OF LEAD PAINT FROM RESIDENTIAL, CHILD CARE, AND SCHOOL BUILDINGS

7025.0010 APPLICABILITY.

Parts 7025.0010 to 7025.0080 establish the procedures that a contractor shall follow to test for the presence of lead paint prior to abrasive blasting and to remove lead paint by abrasive blasting of the exterior of any residential building, child care building, school building, or any building within 100 feet of a residential, child care, or school building, or a playground.

Statutory Authority: *MS s 116.07; 144.878*

History: *16 SR 442; 18 SR 614*

7025.0020 DEFINITIONS.

Subpart 1. **Scope.** For the purposes of parts 7025.0010 to 7025.0080, the terms in subparts 2 to 15 have the meanings given them.

Subp. 2. **Abrasive blasting.** “Abrasive blasting” means the use of air pressure and an abrasive grit to remove surface coatings. Among the techniques specifically identified as abrasive blasting are dry abrasive blasting, wet abrasive blasting, modified–wet abrasive blasting and vacuum blasting.

Subp. 3. **Acid extraction.** “Acid extraction” means laboratory analysis of lead concentration according to Method 3050 as described in “Test Methods for Evaluating Solid Waste Volume 1A: Laboratory Manual Physical/Chemical Methods” SW-846, United States Environmental Protection Agency, Third Edition, November 1986. This document is incorporated by reference and is available through the Minitex interlibrary loan system. This document is not subject to frequent change.

Subp. 4. **Child care building.** “Child care building” means a building that incorporates a place where children are cared for or supervised at any time of the day or year.

Subp. 5. **Commissioner.** “Commissioner” means the commissioner of the Minnesota Pollution Control Agency.

Subp. 6. **Contractor.** “Contractor” means a person or an organization who, for financial gain, directly performs or, through subcontracting or similar delegation, causes abrasive blasting to be performed.

Subp. 7. **Lead paint.** “Lead paint” means a coating that:

A. contains one-half of one percent (0.5 percent) total lead or more, as determined by the analytical methods of acid extraction or by X-ray fluorescence laboratory analyzer;

B. contains one milligram per square centimeter (1.0 mg/cm²) of lead or more, as determined by an X-ray fluorescence hand-held analyzer; or

C. causes a positive reaction when combined with sodium sulfide (Na₂S).

Subp. 8. **Modified-wet abrasive blasting.** “Modified-wet abrasive blasting” means abrasive blasting with the addition of a minimum quantity of water to the air abrasive stream such that dispersal of particulate matter is suppressed with little or no adherence of waste material to the substrate.

Subp. 9. **Playground.** “Playground” means an area designated for children’s play including a school building playground, a child care building playground, a play area of a public park, or an area that contains permanent play equipment.

Subp. 10. **Residential building.** “Residential building” means a single family or multi-unit structure that is used or intended for use as human habitation, including every other structure located within the same lot.

Subp. 11. **School building.** “School building” means a building that contains a public school as defined in Minnesota Statutes, section 120.05, or a nonpublic school, church, or religious organization, or home-school in which a child is provided instruction in compliance with Minnesota Statutes, sections 120.101 and 120.102.

Subp. 12. **Sodium sulfide.** “Sodium sulfide” means a six to eight percent solution of sodium sulfide (Na₂S) compound in water that reacts with lead at concentrations greater than 1.0 percent (10,000 ppm).

Subp. 13. **Total lead.** “Total lead” means the concentration of lead in paint, determined by acid extraction or by X-ray fluorescence laboratory analyzer, expressed in units of parts per million (ppm) or percent (%).

Subp. 14. **Vacuum blasting.** “Vacuum blasting” means dry abrasive blasting with a blast nozzle that is surrounded by a chamber under negative air pressure that is held against the coated surface.

Subp. 15. **X-ray fluorescence analyzer.** “X-ray fluorescence analyzer” or “XRF analyzer” means:

A. a hand-held portable instrument that measures lead concentration (by fluorescence of lead atoms) by gamma radiation, expressed in milligrams per centimeter square (mg/cm²); or

B. a desktop laboratory instrument that measures lead concentration (by fluorescence of lead atoms) by gamma radiation, expressed in parts per million (ppm).

Statutory Authority: *MS s 116.07; 144.878*

History: *16 SR 442; 18 SR 614*

7025.0030 TESTING.

Subpart 1. **Testing required.** A contractor shall test a coating for lead concentration, using the methods required by this part, before using abrasive blasting to remove a coating from the exterior of a residential, child care, or school building, or any building within 100 feet of a residential, child care, or school building, or a playground.

Subp. 2. **Paint samples.** The contractor shall test all layers of paint on the following exterior surfaces from which paint is to be removed:

A. the paint on the original structure;

B. the paint on any addition to the original structure;

C. the paint on each separate structure; and

D. if surfaces have been painted or repainted at different times or with different paints, the paint on each surface.

Subp. 3. **Analysis.** The contractor shall analyze each paint sample for lead concentration using one of the methods in items A to D.

A. Acid extraction. If the contractor tests by acid extraction, the contractor shall analyze for total lead using paint samples that contain equal surface areas of all the paint coatings of the surface that is tested.

B. X-ray fluorescence analyzer. If the contractor tests using a hand-held portable XRF analyzer, the lead concentration for each surface shall be the mean value of at least five separate measurements for that surface. If the contractor tests using a desktop laboratory XRF analyzer, each paint sample shall contain equal surface areas of all paint coatings of the surface that is tested.

C. Sodium sulfide (Na₂S). If the contractor tests using sodium sulfide and obtains a negative test result for lead on any surface painted before 1978, the contractor shall confirm the absence of lead paint by testing a sample from that surface with either acid extraction or an XRF analyzer in the manner required in item A or B.

D. Other analysis methods. The contractor may test for lead concentration using an analysis method not listed in items A to C only if the commissioner approves the analysis method in writing prior to its use. The commissioner shall approve an analysis method if the commissioner finds that the precision and accuracy of the method is comparable to the methods in item A or B.

Subp. 4. **Test results.** The contractor shall provide the test results to the building owner or administrator and the adult residents as part of the notice described in part 7025.0040, subpart 2, to the commissioner as part of the notice described in part 7025.0040, subpart 3, and shall retain the test results for a period not less than five years from the date of the test.

Subp. 5. **Waiver of testing.** A contractor may elect to conduct abrasive blasting of a residential, child care, or school building, or of any building within 100 feet of a residential, child care, or school building, or a playground, without testing to determine the presence and concentration of lead in paint if the contractor treats the paint as lead paint, so states in the notice of part 7025.0040, and otherwise complies with parts 7025.0010 to 7025.0080.

Statutory Authority: *MS s 116.07; 144.878*

History: *16 SR 442; 18 SR 614*

7025.0040 NOTIFICATION.

Subpart 1. **Notice required.** At least five days before the start of abrasive blasting of lead paint on the exterior of a residential, child care, or school building, or of any building within 100 feet of a residential, child care, or school building, or a playground, the contractor shall provide notice as described in items A and B.

A. Written notice as required in subpart 2 must be given to the owner or administrator and the adult residents of the building to be abrasive blasted, and to the owner or administrator and the adult residents of any residential, child care, or school buildings within 50 feet of the building to be abrasive blasted. The contractor must mail or physically hand the notice to the owner or administrator of a child care or school building. For residences, the contractor must mail, physically hand, or put on or under the door of each residence a notice for at least one adult resident of each single-family structure and one adult resident of each unit in a multifamily structure.

B. Written notice as required in subpart 3 must be given to the commissioner.

If the contractor postpones abrasive blasting more than five days from the anticipated start of abrasive blasting stated in the written notices required by this subpart, then the contractor shall, at least two days before the start of abrasive blasting, revise and redistribute the notices required by this subpart with the new days and hours during which abrasive blasting is anticipated.

Subp. 2. **Contents of notice to residents, administrator, and owner.** The notice required in subpart 1, item A, shall state that lead paint is present on the structure, shall provide the results of the test required by part 7025.0030 and the methods of analysis used, shall specify the days and the hours during which abrasive blasting is anticipated, and shall advise the owner or administrator and the adult residents to take the following actions before abrasive blasting begins:

A. close all doors, windows, and storm windows on the walls to be abrasive blasted and their adjoining walls, and on the walls of neighboring buildings that face the structure to be abrasive blasted and their adjoining walls;

B. completely seal from the outside with adhesive tape or caulking the outermost window or storm window to the window frame, the outermost door or storm door to the door frame, and air intake openings on the walls of the neighboring building that are specified in item A. Walls that adjoin the walls facing the abrasive blasting need only be sealed to a distance of 50 feet from the wall to be abrasive blasted;

C. turn off all air conditioning units on the walls to be abrasive blasted and their adjoining walls, and on the walls of neighboring buildings that face the structure to be abrasive blasted and their adjoining walls, and tightly cover all of these units with impermeable material; and

D. take inside or remove from the property within 50 feet of the structure to be abrasive blasted all children's toys and play equipment, or cover equipment that cannot be moved, and all pets, pet houses, and pet food and water bowls.

Subp. 3. **Contents of notice to commissioner.** The notice required in subpart 1, item B, shall state:

A. the address and location of the building to be abrasive blasted;

B. the scheduled starting and completion days and times;

C. the results of the test required by part 7025.0030 and the method of analysis used;

D. the name, business address, and telephone number of the contractor;

E. a description of the building or buildings to be abrasive blasted, including whether each building is a residential, child care, or school building, or within 100 feet of a residential, child care, or school building, or a playground;

F. a copy of the notice given to the owner or administrator and adult residents of each building under subparts 1 and 2;

G. the abrasive blasting method the contractor plans to use;

H. the procedures the contractor plans to use to comply with parts 7025.0010 to 7025.0080;

I. the name and location of the waste disposal site where the debris collected as required by part 7025.0060 will be deposited; and

J. any other information that the commissioner deems necessary to determine that the requirements of parts 7025.0010 to 7025.0080 will be followed.

Statutory Authority: *MS s 116.07; 144.878*

History: *16 SR 442; 18 SR 614*

7025.0050 CONTAINMENT.

Subpart 1. **Containment required.** The contractor shall apply containment, using the methods required by this part, before using abrasive blasting to remove lead paint from the exterior of a residential, child care, or school building, or a building within 100 feet of a residential, child care, or school building, or a playground. The contractor may utilize methods of removal by abrasive blasting or of containment other than those specified in this part only if the commissioner approves the alternative method of removal or containment in writing prior to its use. The commissioner shall approve the alternative method of removal or containment if the contractor demonstrates that the alternative containment method will prevent contamination of soil and house dust at least as well as the methods specified in this part.

Subp. 2. **Sealing the residential, child care, or school building.** Before abrasive blasting begins, the contractor shall:

A. fully close and completely seal from the outside with adhesive tape or caulking the outermost window or storm window to the window frame, the outermost door or storm door to the door frame, and air intake openings on the wall to be abrasive blasted and on the two adjoining walls to a distance of 50 feet from the wall to be abrasive blasted, if the building is a residential, child care, or school building;

B. tightly cover and seal with impervious plastic all air conditioning units and other air intake openings on the walls listed in item A; and

C. if a wall of a neighboring residential, child care, or school building is less than 20 feet from a wall to be abrasive blasted, suspend curtains between the wall to be abrasive blasted and the neighboring building that:

- (1) are parallel to the wall being abrasive blasted;
- (2) extend vertically from the ground to the height of the wall to be abrasive blasted or, if the curtains are located on the neighboring building, extend vertically from the ground to the height of the wall of the neighboring building which faces the wall to be abrasive blasted;
- (3) extend horizontally for the width of the wall to be abrasive blasted or, if the curtains are located on the neighboring building, extend horizontally for the width of the wall on the neighboring building which faces the wall to be abrasive blasted; and
- (4) overlap at each seam a distance of at least 1-1/2 feet.

The contractor shall not conduct abrasive blasting if any windows or doors are open on any wall that faces the wall to be abrasive blasted, and on the adjoining walls to a distance of 50 feet from the wall to be abrasive blasted, of a neighboring residential, child care, or school building that is within a distance from a wall to be abrasive blasted that is less than or equal to the distance of ground cover required by subpart 3.

Subp. 3. Ground cover. Before abrasive blasting begins, the contractor shall completely cover, with impermeable tarpaulins, the ground beneath the wall or structure to be abrasive blasted by:

- A. laying the tarpaulins as close as possible to the building foundation;
- B. overlapping the tarpaulin edges by a distance not less than 1-1/2 feet;
- C. anchoring the tarpaulins at the foundation and along the overlapping edges to prevent separation; and
- D. covering the ground with tarpaulins for a distance of at least 25 feet in all directions from the area of blasting. For each story above the first, the contractor shall increase this distance by ten feet.

Subp. 4. Additional containment required. If visible emissions of particulate matter occur in the air or visible deposits occur on the ground at a distance from the structure greater than the distance of the ground cover, then the contractor shall immediately cease abrasive blasting until the contractor:

- A. adds additional ground cover, in the manner required in subpart 3, to a distance greater than the distance of visible particle transport or deposition;
- B. uses a curtain or curtains that prevent the dispersal of visible particles to a distance beyond the ground cover; or
- C. uses modified-wet abrasive blasting or vacuum blasting, instead of open dry abrasive blasting, to remove the lead paint.

Statutory Authority: *MS s 116.07; 144.878*

History: *16 SR 442; 18 SR 614*

7025.0060 CLEANUP.

Subpart 1. Cleanup. At the end of each workday, the contractor shall recover and remove all blasting debris including used abrasive; wood, brick, or stucco dust; and paint particles from:

- A. the roof and the roof gutters of the building that was abrasive blasted, while ground covers remain in place;
- B. the ground covers in such a way as to not deposit any blasting debris on the ground; and
- C. all soil, grass, walkways, porches, patios, steps, outside window wells and door wells, shrub and flower beds, and any other places surrounding the building that was abrasive blasted and any neighboring buildings, so that no visible deposits remain.

Subp. 2. **Cleanup methods.** The contractor may remove the blasting debris by manual means or by vacuum, but shall not use an air pressure stream or a water stream which redistributes, but does not remove, the blasting debris. The contractor may use air pressure to remove particles from exterior walls, but only if ground covers are in place as required by part 7025.0050, subpart 3, and only before the adhesive tape or caulking seals and the curtains required by part 7025.0050, subpart 2, are removed.

Subp. 3. **Removal and transportation.** The contractor shall remove and transport all blasting debris from the property in such a way as to prevent any deposition of blasting debris on the property, the right-of-way, the walkway, or the roadway.

Subp. 4. **Disposal.** The contractor shall dispose of the blasting debris as required by either chapter 7035 or 7045, whichever applies.

Statutory Authority: *MS s 116.07; 144.878*

History: *16 SR 442; 18 SR 614*

7025.0070 RESTRICTIONS.

Subpart 1. **Wet abrasive blasting.** A contractor shall not use wet abrasive blasting to remove lead paint, but may use modified-wet abrasive blasting to remove lead paint if the contractor complies with parts 7025.0010 to 7025.0080.

Subp. 2. **Reuse of abrasive.** A contractor shall not reuse or recycle abrasive for abrasive blasting of lead paint unless the abrasive is cleaned prior to reuse by a dust collector that removes the lead paint particles or unless the abrasive is used only for vacuum blasting conducted as required in part 7025.0080.

Subp. 3. **Access of children.** The contractor shall make a reasonable effort to prevent children under the age of ten years from entering the area within 50 feet of abrasive blasting while it is occurring and until cleanup as required by part 7025.0060 is completed. If a child under the age of ten years comes within 50 feet of abrasive blasting while it is occurring, abrasive blasting shall immediately cease until the child leaves or is removed from the area.

Subp. 4. **Identification of contractor.** The contractor shall post its name and telephone number in letters and numbers at least four inches high on a vehicle at the property or on a sign posted on the property from the commencement of abrasive blasting until completion of the contractor's work at the building.

Statutory Authority: *MS s 116.07; 144.878*

History: *16 SR 442; 18 SR 614*

7025.0080 VACUUM BLASTING.

Subpart 1. **Certain contractors exempt from requirements.** A contractor that uses vacuum blasting to remove lead paint from all parts of a structure is exempt for that structure only from the requirements of subpart 2 if:

- A. the contractor removes all paint by holding the workhead of the vacuum blasting unit at all times against the substrate;
- B. all parts of the vacuum blasting equipment are in a condition that prevents emissions of particulate matter; and
- C. no other method of abrasive blasting is used.

Subp. 2. **Inapplicable requirements.** Contractors described in subpart 1 are exempt from the following requirements:

- A. part 7025.0040, subparts 1 and 2, to the extent that they require the contractor to notify the owner or administrator and adult residents of neighboring buildings;
- B. part 7025.0050, subpart 4; and
- C. part 7025.0050, subpart 2, item C.

For contractors described in subpart 1, the requirement of part 7025.0050, subpart 3, item D, of distance of ground cover is reduced to a minimum of 15 feet in all directions of the point of blasting and need not be increased according to the height of the structure.

Statutory Authority: *MS s 116.07; 144.878*

History: *16 SR 442; 18 SR 614*

REMOVAL OF LEAD PAINT FROM STEEL STRUCTURES

7025.0200 APPLICABILITY.

Parts 7025.0200 to 7025.0380 establish the procedures that an owner or a contractor shall follow to remove lead paint from the exterior surface of a steel structure that is permanently fixed in an outside location, from a mobile or portable steel structure that is located outside at the time that lead paint is removed from its surface, and from exterior metal components of buildings.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0210 DEFINITIONS.

Subpart 1. **Scope.** For the purposes of parts 7025.0200 to 7025.0380, the terms in this part have the meanings given them.

Subp. 2. **Abrasive blasting.** “Abrasive blasting” means the use of either air pressure or a centrifugal wheel and abrasive particles to remove surface coatings or to prepare a surface for paint application.

Subp. 3. **Acid digestion.** “Acid digestion” means laboratory analysis of lead concentration according to digestion method 3050 or 3051 and analytical method 6010 or 7420 as described in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846,” volume 1A, United States Environmental Protection Agency (EPA), Third Edition, November 1986; or laboratory analysis according to method 3335 of the American Society for Testing and Materials as described in “Annual Book of ASTM Standards,” volume 06.01, June 1984. These documents are incorporated by reference and are available at the State Law Library through the Minitex interlibrary loan system. They are not subject to frequent change.

Subp. 4. **Bridge.** “Bridge” means a roadway, railway, or pedestrian bridge with steel trusses or girders that is part of a roadway or that traverses a roadway, railway, walkway, or waterway.

Subp. 5. **Child care property.** “Child care property” means property that incorporates a child care building where children are cared for or supervised at any time of the day or year.

Subp. 6. **Commissioner.** “Commissioner” means the commissioner of the Minnesota Pollution Control Agency.

Subp. 7. **Contractor.** “Contractor” means a person, an organization, or a corporation who, for financial gain, directly performs paint removal from the exterior of a steel structure or, through subcontracting or similar delegation, causes such paint removal to be performed.

Subp. 8. **Ground storage tank.** “Ground storage tank” means a water, fuel, chemical, fertilizer, or other storage tank that has a height above the ground less than 20 feet; a diameter greater than or equal to its height; or a length greater than its height; or a portable storage tank.

Subp. 9. **High-efficiency particulate air filter.** “High-efficiency particulate air (HEPA) filter” means a filter that removes from the air at least 99.97 percent of all particles greater than 0.3 microns in diameter.

Subp. 10. **Lead paint.** “Lead paint” means a coating that contains:

A. one-half of one percent (0.5 percent), or 5,000 parts per million (5,000 ppm), or more of total lead by weight in the dried film as determined by acid digestion and analysis; or

B. one-half milligram per square centimeter (0.5 mg/cm²) or more of lead, as determined by X-ray fluorescence analyzer.

Subp. 11. **Low-dust nonsilica abrasive.** “Low-dust nonsilica abrasive” means an abrasive particle product that is rated by the manufacturer as a low-dust abrasive and that contains less than one percent (1.0 percent) free silica by weight.

Subp. 12. **Owner.** “Owner” means a person, organization, corporation, or governmental or political entity, and its employees, to whom a steel structure belongs and who performs paint removal from the structure or who contracts for its removal.

Subp. 13. **Playground.** “Playground” means an area designated for children’s play including a school playground, a child care building playground, a play area of a public park, or an area that contains permanent play equipment.

Subp. 14. **Power tool.** “Power tool” means an electric or pneumatic rotary peening tool, needle gun, or other tool that breaks and removes a coating but does not abrade the coating, or an electric or pneumatic tool that does abrade the coating and is equipped with a high-efficiency particulate air (HEPA) filter vacuum.

Subp. 15. **Protected natural area.** “Protected natural area” means a designated national park, national wildlife refuge, national wild and scenic river, nature center, or environmental learning center; an area designated by the Minnesota Department of Natural Resources (MnDNR) as a wildlife management area, scientific and natural area, state park, research natural area, waterfowl production area, area of special interest; a site officially registered with any unit of government through the scientific and natural area program of the MnDNR; or a site of occurrence of unique plant or animal life identified by the natural heritage program of the MnDNR.

Subp. 16. **Public use property.** “Public use property” means property that includes a building used by the public, a recreational area, or a public parking lot, but does not mean property that includes only a playground or only a roadway.

Subp. 16a. **Representative of the owner.** “Representative of the owner” means any person, organization, corporation, contractor, or other entity and its employees, who performs or exercises control over any portion of a project subject to the provisions of parts 7025.0200 to 7025.0380. This includes, but is not limited to, project design and specifications, identification and testing of paint, project notifications, and project oversight or supervision.

Subp. 17. **Residential property.** “Residential property” means property that incorporates a single-family or multiunit building that is intended for use for human habitation.

Subp. 18. **School property.** “School property” means property that contains a public school building as defined in Minnesota Statutes, section 120.05, or a nonpublic school, church, or religious organization building in which a child is provided instruction in compliance with Minnesota Statutes, sections 120.101 and 120.102.

Subp. 19. **Steel structure.** “Steel structure” means a structure that has a steel surface from which lead paint might be removed in the ambient air and includes, but is not limited to:

- A. steel girders or trusses of a bridge;
- B. water storage tanks;
- C. fuel and chemical storage tanks;
- D. fertilizer tanks;
- E. grain storage bins;
- F. railcars;
- G. buildings;
- H. pipelines;
- I. boats and barges;
- J. transmission towers;
- K. transformers;
- L. light poles;
- M. locks and dams;
- N. parking ramps;
- O. handrails, walkways, and stairways;
- P. vehicles that are used for commerce, industry, or construction;
- Q. steel structures of utilities, power plants, water and waste treatment facilities, pulp and paper mills, chemical and food processing plants, petroleum refining plants, and shipyards; and
- R. other industrial and commercial equipment.

7025.0210 LEAD PAINT REMOVAL

486

Subp. 20. **Vacuum blasting.** "Vacuum blasting" means abrasive blasting with either a blast module or a blast nozzle surrounded by a chamber that is evacuated with negative air pressure and that is held against the coated surface.

Subp. 20a. **Water body.** "Water body" means any river, stream, lake, pond, marsh, watercourse, waterway, spring, reservoir, drainage ditch, and any other body of surface water that is contained within, flows through, or borders on the state.

Subp. 21. **Water tank.** "Water tank" means a ground storage tank, standpipe, or water tower that is used as a reservoir of water.

Subp. 22. **Water tower.** "Water tower" means an elevated multileg tank, a pedestal column spherical tank, or a fluted column tank or hydropillar used as a reservoir of water.

Subp. 23. **Wet abrasive blasting.** "Wet abrasive blasting" means abrasive blasting with the addition of water to the air abrasive stream.

Subp. 24. **X-ray fluorescence analyzer or XRF analyzer.** "X-ray fluorescence analyzer" or "XRF analyzer" means a field instrument that measures lead concentration by in-fluorescence of lead atoms, expressed in milligrams per centimeter square (mg/cm²).

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202; 23 SR 2224*

7025.0220 COMPLIANCE.

Subpart 1. **Lead paint removal requirements.**

A. An owner or contractor who removes lead paint from a steel bridge shall comply with parts 7025.0230 to 7025.0300 and 7025.0380.

B. An owner or contractor who removes lead paint from a steel water tank, ground storage tank, grain storage bin, or other storage structure shall comply with parts 7025.0230, 7025.0240, 7025.0310 to 7025.0350, and 7025.0380.

C. An owner or contractor who removes lead paint from a steel structure not cited in item A or B, shall comply with parts 7025.0230, 7025.0240, and 7025.0360 to 7025.0380.

Subp. 2. **Use of alternative methods.** The owner or contractor may use methods of paint analysis, paint removal, and containment other than those specified in this part if the commissioner approves the alternative method in writing prior to its use. The commissioner shall give conditional approval of the alternative method if the owner or contractor submits a request in writing that:

A. provides product specifications and either original documentation or manufacturer data that demonstrate that the method provides analysis of equivalent accuracy or pollution control of equivalent or greater efficiency than the methods specified in this part; and

B. identifies the specific provisions of the rule for substitution with the alternative method.

Subp. 3. **Compliance with other regulations.** Nothing in parts 7025.0200 to 7025.0380 shall be construed to allow testing, removal, containment, recovery, or disposal of lead paint or lead paint particles from steel structures in violation of local regulations or federal or state rules and statutes, including those relating to occupational safety and health, which include Code of Federal Regulations, title 29, section 1926.62, as adopted by reference in part 5205.0010.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0230 IDENTIFICATION OF LEAD IN PAINT.

Subpart 1. **Testing required.** An owner, or representative of the owner, shall test a coating for total lead concentration, using the methods required by this part, before the owner or contractor removes the coating from the exterior of a steel structure, except as provided in subpart 2, items A and C, unless removal is to be conducted inside a building. The owner of a steel structure shall retain paint test records for a minimum of three years.

Subp. 2. **Sampling procedure and analysis.** The samples collected or measured as required by this subpart shall be representative of the coatings to be removed. Each collected sample shall include equal surface areas and the entire thickness of each coating. The lead concentration of a surface sample measured by an XRF analyzer shall be the mean value of a minimum of three different measurements of that surface. If parts of the steel structure have been painted at different times or with different paints, a sample of each coating from each of these parts must also be collected or measured.

A. **Bridges.** Prior to paint removal, the owner of a bridge shall determine the concentration of lead in paint on the bridge either by review of painting records or by XRF analysis or acid digestion analysis of a minimum of one paint sample from a girder bridge or one paint sample from the trusses and one from the girders of a truss bridge.

B. **Storage structures.** Prior to paint removal, the owner of a water tank, fuel tank, grain storage bin, or other storage structure shall determine the concentration of lead in paint on the structure by either XRF analysis or acid digestion analysis of each sample of paint.

(1) **Multileg water tank.** The owner shall collect or measure, at a minimum, one paint sample from the legs, one sample from the center column, and one sample from the reservoir, for a total of three samples.

(2) **Other water tower.** The owner shall collect or measure, at a minimum, one paint sample from the base of the column and one sample from the top of the column or the reservoir, for a total of two samples.

(3) **Ground storage tank, standpipe, or grain storage bin.** The owner shall collect or measure, at a minimum, one paint sample from the wall and one sample from the roof of a ground storage tank where the same paint will be removed from one or more identical structures and, for standpipes and grain storage bins, one sample from the bottom half and one from the top half of the wall, for a total of two samples.

(4) **Small storage tank.** The owner shall collect or measure, at a minimum, one paint sample from a fixed storage tank with less than 1,000 square feet surface area and one paint sample from a portable storage tank where the same paint will be removed from one or more identical tanks.

C. **Other steel structures.** Prior to paint removal, the owner of a steel structure, other than a bridge or a storage structure, or the owner of a painting facility shall determine the concentration of lead in paint on the structure either by review of painting records or by XRF analysis or acid digestion analysis of a minimum of one sample of paint.

Subp. 3. **Calculation of lead concentration.** Where samples are analyzed from different parts of one structure, the calculation of lead concentration for the structure is the sum of the following product for each of the samples:

$$\begin{array}{l} \text{surface area of part represented} \\ \text{by sample as a percent of total} \\ \text{surface area of structure} \end{array} \quad \times \quad \begin{array}{l} \text{Pb concentration of} \\ \text{sample (\% or mg/cm}^2\text{)} \end{array}$$

such that:

$$(\text{area}_A \times \text{Pb}_A) + (\text{area}_B \times \text{Pb}_B) + \dots +$$

$$(\text{area}_N \times \text{Pb}_N) = \text{lead concentration (\% or mg/cm}^2\text{)}$$

where "A," "B," "N" are sample areas; "area" is the surface area of the part of the structure expressed in whole percent of total surface area, so that the sum of all surface areas is equal to 100 percent; and "Pb" is the concentration of total lead expressed in percent as a decimal or the weight of lead per surface area expressed in mg/cm² divided by 100.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202; 23 SR 2224*

7025.0240 NOTIFICATION.

Subpart 1. **Notice required.** The owner, or representative of the owner, of a steel structure or the owner, or representative of the owner, of a painting facility shall provide notice as described in items A and B at least ten working days before the start of removal of lead paint from a total exterior surface area greater than 500 square feet on one steel structure or on

more than one steel structure at one location during one calendar year. Stationary painting facilities that have applied for an air quality permit as required by chapter 7007, permits and offsets rules, whose only emissions are due to paint removal and repainting operations, are exempt from notification.

A. The owner, or representative of the owner, must give written notice as required in subpart 2 to the adult residents of buildings, and to the owner or administrator of any child care or school buildings, within a distance to a single steel structure of 50 feet or twice the height of the structure, whichever is greater, but not to exceed 500 feet. Notification is required within 200 feet of a bridge portion. For multiple storage structures at one location, this distance is equal to the sum of the heights of individual structures from which lead paint is removed during one year, not to exceed 200 feet. The owner, or representative of the owner, must mail or deliver the notice to the owner or administrator of a child care or school building. The owner, or representative of the owner, must mail, deliver, or put on or under the door of each residence one notice for each single-family building and one notice for each unit of a multiunit building.

If the owner, or representative of the owner, postpones the beginning of paint removal more than five working days from the date stated in the written notices required by this subpart, the owner, or representative of the owner, shall redistribute each of the notices with the revised schedule for paint removal within five working days of the original starting date.

B. The owner, or representative of the owner, must mail, facsimile, or deliver written notice to the commissioner as required in subpart 3. Any corrections to the information provided in the notice shall be made in writing and received by the commissioner no later than the date the change is initiated. However, a change of the project starting date to an earlier starting date requires advance notification of ten working days.

If the owner, or representative of the owner, postpones the beginning of paint removal from the date stated in the original written notice, the commissioner must be renotified before the original starting date of paint removal by a supplemental notice with the revised schedule. The owner, or representative of the owner, shall mail, facsimile, or deliver amended notifications to the commissioner.

Subp. 2. Contents of notice to residents, administrator, and owner. The notice required in subpart 1, item A, shall state that lead paint is present on the structure, shall specify the days and the hours during which paint removal is anticipated, and shall advise the owner or administrator and the adult residents of buildings to prevent children under the age of ten years from entering the outdoor area within 100 feet of the structure or structures or bridge portion from the start of paint removal each day until the completion of cleanup after paint removal.

If dry abrasive blasting or wet abrasive blasting is the method of paint removal, the notice shall further advise the owner or administrator and the adult residents of buildings within 100 feet of the structure or structures or bridge portion, or within a distance equal to the height of the structure, whichever is greater, to take the following actions each day before paint removal begins:

A. close all doors, windows, and storm windows on the walls that face the structure to be abrasive blasted and their adjoining walls;

B. turn off all air conditioning units that use outdoor air exchange on the walls that face the structure and their adjoining walls, and tightly cover these units with impermeable material; and

C. take inside or remove from the exterior property all pets, pet houses, pet food and water bowls, and all children's toys and play equipment, or cover the equipment that cannot be moved.

Subp. 3. Contents of notice to commissioner. The notice required in subpart 1, item B, shall include:

A. the type of steel structure from which paint is to be removed and the address or location of the structure or structures;

B. the scheduled starting and completion days and times;

C. a copy of the painting records or paint test results required by part 7025.0230;

D. the name, business address, and telephone number of the contractor, the consultant, and the owner, and the name of one contact person for each company and owner;

E. if the structure from which lead paint is to be removed is either a bridge or a steel structure in part 7025.0370, item C, a description of the bridge or structure that includes:

(1) the number of total square feet of surface area from which paint will be removed;

(2) the distance to the property nearest the bridge or structure for each kind of property designated in part 7025.0250 up to 500 feet; and

(3) the class of pollution control to be applied to each bridge portion or structure as required in parts 7025.0250 and 7025.0260 to 7025.0300; or

F. if the structure from which lead paint is to be removed is either a storage structure or a steel structure in part 7025.0370, item A, a description of the structure that includes:

(1) the number of total square feet of surface area from which paint will be removed;

(2) the calculation of potential risk factor (RF) from part 7025.0310;

(3) the distance to the property nearest the structure for each kind of property designated in the table in part 7025.0310 up to 500 feet; and

(4) the class of pollution control to be applied to the structure from the table in part 7025.0310;

G. a copy of the notice given to the adult residents and to the owner or administrator in subparts 1 and 2, with a list of addresses, within the distance required by subpart 1, that received notification;

H. the paint removal methods and the containment methods the owner or contractor will use to comply with parts 7025.0260 to 7025.0300, 7025.0320 to 7025.0350, and 7025.0360 to 7025.0370;

I. the name and location of the waste disposal site where the waste collected as required by parts 7025.0260 to 7025.0300, 7025.0320 to 7025.0350, and 7025.0360 to 7025.0370, and disposed of as required by part 7025.0380, will be deposited; or a description of the proposed disposition of waste materials that are not put in a waste disposal site; or, if the waste generator is a hazardous waste facility permitted by the MPCA, the EPA identification number of the facility; and

J. any other information that the commissioner may request to determine compliance with parts 7025.0200 to 7025.0380.

Any corrections to the information provided in the notice shall be made in writing by a supplemental notice that the owner shall mail, facsimile, or deliver to the commissioner.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202; 23 SR 2224*

CONDITIONS FOR LEAD PAINT REMOVAL FROM BRIDGES

7025.0250 CLASSIFICATION OF BRIDGES.

Subpart 1. **Application.** The classifications in this part shall be used to determine the requirements in parts 7025.0260 to 7025.0300 that apply to a bridge or bridge portion from which lead paint will be removed. The owner or contractor shall determine the class of each bridge or bridge portion.

Subp. 2. **Class I.** A bridge or bridge portion is class I if it is not within 100 feet of, or is not above, a water body and is not within:

A. 300 feet of residential, child care, or school property or a playground;

B. 200 feet of public use, commercial, or protected natural area property; or

C. 100 feet of industrial or agricultural property.

Subp. 3. **Class II.** A bridge or bridge portion is class II if it is within 100 feet of, or is above, a water body, but otherwise meets the qualifications in subpart 2, items A to C, for a class I bridge.

7025.0250 LEAD PAINT REMOVAL

490

Subp. 4. **Class III.** A bridge or bridge portion is class III if it is not within 100 feet of, and is not above, a water body, but is within:

- A. 300 feet of residential, child care, or school property or a playground;
- B. 200 feet of public use, commercial, or protected natural area property; or
- C. 100 feet of industrial or agricultural property.

Subp. 5. **Class IV.** A bridge or bridge portion is class IV if it is within 100 feet of, or is above, a water body, but otherwise meets the qualifications in subpart 4, items A to C, for a class III bridge.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0260 POLLUTION CONTROL REQUIRED.

An owner or contractor who removes lead paint from a steel bridge shall use the paint removal and containment methods required in parts 7025.0260 to 7025.0300, except that paint removal conducted only for the purpose of coatings analysis is exempt. Pollution control must be used on a bridge or other structure that traverses a state boundary, as if the bridge or structure were entirely in Minnesota, unless the owner or contractor complies with requirements of the neighboring state or province that are more restrictive in preventing lead contamination than those in parts 7025.0260 to 7025.0300.

The owner or contractor who uses dry abrasive blasting for surface preparation after removing all lead paint with any other method shall use the containment methods required in part 7025.0270, subparts 2 and 3, except that the use of curtains is not required if:

- A. a low-dust nonsilica abrasive is used;
- B. the total area of surface preparation is less than 1,000 square feet;
- C. the bridge or bridge portion is class I or class II, or it is class III or class IV due to proximity of industrial or agricultural property only; and
- D. particulate matter does not cross the owner's property line.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0270 CLASS I BRIDGE.

Subpart 1. **Application.** An owner or contractor who removes lead paint from a class I bridge or bridge portion by dry abrasive blasting shall use the methods required in this part as minimum pollution control, or the owner or contractor shall use a method of removal from part 7025.0290. For those portions of the bridge where curtains and ground cover cannot be used, the owner or contractor shall use the containment methods of part 7025.0280, subpart 2, item A or B.

Subp. 2. **Ground cover.** The owner or contractor shall use 100 percent impermeable tarpaulins to prevent deposition on the soil and on vegetation. The owner or contractor shall overlap the tarpaulins at least 1-1/2 feet and weight them to prevent separation except on woody vegetation. The tarpaulins must cover the surface of all bare soil and vegetated areas inside the curtains required by subpart 3 and shall extend a minimum of 30 feet in all directions beyond the vertical extension of the curtains. Hard paved surfaces such as asphalt and concrete roadway, sidewalk, and slope paving may be left uncovered if they have an unbroken surface and if the owner or contractor thoroughly cleans these surfaces as described in subpart 5.

Subp. 3. **Curtains or barriers.** The owner or contractor shall use curtains rated by the manufacturer at not less than 100 percent impermeable to contain lead paint particles generated from both trusses and girders. The curtains must overlap at least three feet unless the edges are completely joined.

A. Girders and undertrusses. When lead paint is removed from girders and undertrusses, the owner or contractor shall suspend curtains from the bridge deck so that the work area is contained on four sides. The owner or contractor shall seal the spaces between the

beams above the transverse curtain. The curtains must extend to the ground cover and they must be anchored.

B. Overtrusses. When lead paint is removed from overtrusses, whether the roadway is closed to traffic or not closed to traffic, the owner or contractor shall:

(1) suspend curtains both inside and outside of each truss from a height greater than the point of paint removal, with a width less than the length of ground cover, and with the bottom edges within curtains suspended from the bridge deck in the manner required for girders; or

if the roadway is closed to traffic, the owner or contractor shall:

(2) suspend curtains outside of the opposite trusses from a height greater than the point of paint removal, with a width less than the length of ground cover, and with the bottom edges resting on the roadway or within curtains suspended from the bridge deck in the manner required for girders; or

(3) suspend a rigid barrier outside the truss with the bottom edge resting on or directly above the roadway and inclined at an angle of 45 to 55 degrees with the truss, with a width less than the length of ground cover, a length not less than the height of the truss, and with the space between the end of the barrier and the truss closed with impermeable material; and

(4) suspend curtains across the bridge deck between the opposite trusses at both ends of the area of paint removal from a height greater than the point of paint removal.

Subp. 4. Windspeed limitation. The owner or contractor shall not conduct paint removal whenever windspeeds render the curtains and ground cover ineffective in containing particulate matter from both trusses and girders. If visible emissions of particulate matter occur in the air, or visible deposits occur on the ground, at a distance from the bridge greater than the distance of the ground cover, then the owner or contractor shall:

A. add additional ground cover, in the manner required in subpart 2, to a distance greater than the distance of visible particle transport or deposition; or

B. if paint is removed from overtrusses, enclose the top of the area of paint removal; or

C. if dry abrasive blasting is being used, use another method of paint removal from part 7025.0290.

Subp. 5. Cleanup of waste material. The owner or contractor shall clean up all visible deposits of waste material containing paint or paint particles at the end of each workday from all areas on the ground and the ground covers outside the curtains and remove this material from the site or store it in containers or on top of ground cover and covered with impermeable tarpaulins. The owner or contractor shall recover this material by manual means or by vacuum, but may not use an air pressure or water stream which redistributes the waste material. Methods of handling and movement of waste material shall prevent fugitive dust and other loss of any material until final disposition of the material.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0280 CLASS II BRIDGE.

Subpart 1. Application. An owner or contractor who removes lead paint from a class II bridge or bridge portion by dry abrasive blasting shall use the methods required in part 7025.0270, subparts 2 to 5, and in this part as minimum pollution control, or the owner or contractor shall use a method of removal from part 7025.0290. If the bridge traverses a narrow water body as stated in subpart 3, the owner or contractor shall comply with the standards specified under either subpart 2 or 3.

The owner or contractor shall use a boom on the downstream or the downwind side of the bridge with skimming or vacuuming of the water surface to remove paint particles before they sink, except on those parts of the water surface where frequent boat navigation or water turbulence prevents effective recovery.

Subp. 2. Protection of any body of water. To prevent lead paint particles from entering any water body, the owner or contractor shall:

A. suspend impermeable tarpaulins horizontally beneath the bridge deck or suspend nets lined with impermeable tarpaulins horizontally beneath the bridge deck to contain waste materials;

B. suspend scaffolding that supports a platform beneath the bridge deck lined with impervious materials to contain waste deposits;

C. secure a barge or a raft covered with impervious materials beneath the bridge and use impervious materials to direct waste material to the raft or to within the barge; or

D. collect and remove waste material from a frozen water surface with ground cover as required in part 7025.0270, except that the ground cover must extend in a downwind direction on the ice to a distance greater than the highest point of paint removal.

The curtains used to contain the girders and trusses in part 7025.0270 shall extend from outside the painted surfaces to inside the tarpaulins, or to the platform or the raft, or inside impervious material that extends to inside the barge, or to the ice.

Subp. 3. **Protection of narrow bodies of water.** The methods in this subpart may be applied as an alternative to subpart 2 by the owner or contractor who shall:

A. suspend an impermeable tarpaulin across the underside of the bridge deck at a point more than halfway across the water body with the bottom edge anchored at the farther bank so that it overlaps the ground covers, seal the spaces between the beams above the tarpaulin, and then repeat the procedure in the opposite direction; or

B. cover a platform above the water surface with impermeable tarpaulins that overlap the ground covers.

The curtains used to contain the girders and trusses in part 7025.0270 shall extend from outside the painted surfaces to inside the tarpaulin or inside impervious material that extends to the platform.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0290 CLASS III BRIDGE.

Subpart 1. **Application.** An owner or contractor who removes lead paint from a class III bridge or bridge portion shall use the methods required in part 7025.0270, subparts 2 to 5, as minimum pollution control, except as provided in subparts 2, 3, and 5 of this part, and a method of paint removal from this part.

Subp. 2. **Wet abrasive blasting.** The owner or contractor who uses wet abrasive blasting shall use curtains rated by the manufacturer at not less than 85 percent impermeable and if dry abrasive blasting is used for surface preparation. The owner or contractor shall use an amount of water such that dispersal of particulate matter is suppressed without loss of waste material from the ground cover or impervious materials by runoff.

Subp. 3. **Power tools and hand tools.** The owner or contractor who uses power tools or hand tools shall use ground cover and curtains unless the power tools are equipped with HEPA filter vacuums and all parts of the vacuum equipment are in a condition that prevents emissions of particulate matter, then the use of curtains is not required.

Subp. 4. **Dry abrasive blasting in total enclosure with negative air pressure.** The owner or contractor who conducts dry abrasive blasting inside a totally enclosed work space shall:

A. maintain the enclosure at less-than-atmospheric air pressure during abrasive blasting by use of a dust collector with filtration of exhaust air to eliminate dust emissions; and

B. use either a recyclable or nonrecyclable abrasive, but a recyclable abrasive must be cleaned to remove nonabrasive material before it is reused.

Subp. 5. **Vacuum blasting.** The owner or contractor who uses vacuum blasting shall use ground cover and curtains unless the owner or contractor:

A. removes all paint by holding the workhead of the vacuum blasting unit at all times against the substrate; and

B. maintains all parts of the vacuum blasting equipment in a condition that prevents emissions of particulate matter, then the use of curtains is not required.

If the owner or contractor cannot maintain complete contact between the workhead and the coated surface at all times, then curtains shall be used with ground cover.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0300 CLASS IV BRIDGE.

The owner or contractor who removes lead paint from a class IV bridge or bridge portion shall use the methods required in parts 7025.0270, subparts 2 to 5, and 7025.0280, subparts 1 and 2 or 3, as minimum pollution control, and a method of paint removal required in part 7025.0290.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

CONDITIONS FOR LEAD PAINT REMOVAL FROM STORAGE STRUCTURES

7025.0310 CLASSIFICATION OF STORAGE STRUCTURES.

Subpart 1. **Application.** The classifications in this part shall be used to determine the requirements in parts 7025.0320 to 7025.0350 that apply to a storage structure from which lead paint will be removed. The owner or contractor shall determine the class of each storage structure or structures from which more than 200 square feet of lead paint will be removed at one location during one calendar year.

Subp. 2. **Class of pollution control.** The class of pollution control necessary for lead paint removal from the storage structure is provided by the table in subpart 3. The class of pollution control is determined by the designated use of receptor properties, the distance to receptor properties, and a factor of potential risk for paint removal from the structure, where:

A. "Receptor properties" are properties designated by use and ranked by sensitivity to lead contamination in groups "A," "B," and "C." These groups include residential, child care, playground, and school property (A); protected natural area, public use area, and commercial property (B); and industrial and agricultural property (C). Receptor properties for structures on group A and B properties include the property on which the structure is located and also neighboring properties. Receptor properties for structures on group C property include only neighboring properties.

B. "Distance (ft)" is the measure of distance in feet from the base of the steel structure to the receptor property line. The values in the table in subpart 3 are the standards of distance for the designated properties. If the structure is located on a property listed in item A, that property is considered a receptor property and the distance for that property is zero feet, except for group C properties.

C. "Risk factor (RF)" is the calculation of potential risk for the steel structure and the values in the table in subpart 3 are the standards of risk factor for the designated properties.

Risk factor (RF) is the product of three variables:

(1) concentration of total lead in the exterior coatings of the steel structure, expressed in whole percent (%) or the weight of lead per surface area expressed in mg/cm²:

(a) for structures less than 15 feet in height, the concentration or weight is divided by one;

(b) for structures 15 feet or more, but less than 50 feet in height, the concentration or weight is divided by ten; and

(c) for structures 50 feet or more in height, the concentration or weight is divided by 100;

(2) height of steel structure divided by ten and raised to the 1.4 power, expressed in feet (ft);

MINNESOTA RULES 2007

7025.0310 LEAD PAINT REMOVAL

494

(3) total exterior surface area from which paint will be removed, expressed in thousands of square feet (ft²) such that:

$$RF = \text{conc. Pb (\% or mg/cm}^2\text{)} \times (\text{height}/10)^{1.4} \text{ (ft)}$$

x surface area/1000 (ft²)

D. "Class" is the class of pollution control required for the steel structure as determined by the standards of risk factor and distance and by the property use designation.

Each structure will have one distance to each of the nearest receptor properties and one risk factor and one class of pollution control. The class of pollution control for the structure is the highest class determined by the risk factor and the distance to receptor property, with class III being the highest class.

Subp. 3. Table of required class of pollution control.

	Receptor Property		
	Residential, Child Care, Playground, or School Property (A)		
Risk Factor (RF)	< 100	≥ 100	≥ 100
	and	or	and
Distance (ft)	> 300	≤ 300	≤ 300
Class	I	II	III
	Protected Natural Area, or Public Use Area, or Commercial Property (B)		
Risk Factor (RF)	< 200	≥ 200	≥ 200
	and	or	and
Distance (ft)	> 200	≤ 200	≤ 200
Class	I	II	III
	Industrial or Agricultural Property (C)		
Risk Factor (RF)	< 300	≥ 300	≥ 300
	and	or	and
Distance (ft)	> 100	≤ 100	≤ 100
Class	I	II	III

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202; 23 SR 2224*

7025.0320 POLLUTION CONTROL REQUIRED.

An owner or contractor who removes lead paint from the exterior surface of a steel water tank, fuel tank, grain storage bin, or other steel storage structure shall use the paint removal and containment methods required in parts 7025.0320 to 7025.0350, except that paint removal conducted only for the purpose of coatings analysis is exempt. If lead paint is removed from a total surface area less than 200 square feet on one or more structures at one location in one calendar year, the owner or contractor may apply any method of class I, II, or III in parts 7025.0330 to 7025.0350.

The owner or contractor who uses dry abrasive blasting for surface preparation after removing all lead paint with any other method shall use the containment methods required in part 7025.0330, subparts 2 and 4, except that the use of curtains is not required if:

A. a low-dust nonsilica abrasive is used;

B. the structure is in proximity only to receptor properties B and C in the table in part 7025.0310, subpart 3, and

height of structure (ft)	x	area of surface preparation (ft ²)	< 10
5,000			

or the structure is in proximity only to receptor properties C; and

C. particulate matter does not cross the owner's property line.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0330 CLASS I STORAGE STRUCTURE.

Subpart 1. Application. An owner or contractor who removes lead paint from a storage structure that requires class I pollution control shall use the methods in this part as minimum pollution control for dry abrasive blasting, or the owner or contractor shall use a method of removal and containment in part 7025.0340 or 7025.0350.

Subp. 2. Curtains. The owner or contractor shall suspend a curtain throughout paint removal on the upwind side and the downwind side of the structure, except as provided in item B, in a manner that effectively prevents the dispersal of paint particles. The curtains shall be rated by the manufacturer at not less than 100 percent impermeable.

A. If the structure is a water tower, standpipe, or a grain storage bin, the length of each curtain must be greater than two-thirds the height of the structure and the width of each curtain must be greater than the largest diameter of the structure.

The curtains shall be moved so that the point of paint removal shall always be at least ten feet inside a vertical edge of a curtain and ten feet below the upper edge of a curtain, except where paint removal is conducted beneath curtains attached along their upper edge to the wall of the structure.

B. If the structure is a ground storage tank, the length of each curtain must be greater than the height of the tank and the width of each curtain must be greater than the diameter or the length of the tank. The owner or contractor may suspend a curtain only on the downwind side of the tank, but the width of this curtain must be greater than the length of the tank or than half the circumference of the tank.

Subp. 3. Removal above curtains. The owner or contractor shall remove all paint from any surface above the curtains with wet abrasive blasting, power tools or hand tools, vacuum blasting, or chemical stripping, except that dry abrasive blasting may be used if the surface is enclosed. If dry abrasive blasting is used for surface preparation following paint removal, the use of enclosure is not required with the conditions in part 7025.0320, items A to C.

Subp. 4. Ground cover. The owner or contractor shall completely cover the ground beneath the base of the structure and on the downwind side of the structure with 100 percent

impermeable tarpaulins to prevent deposition on soil and vegetation. The owner or contractor shall overlap the tarpaulins at least 1-1/2 feet and weight them to prevent separation.

A. Ground cover for a water tower shall extend from the center column a minimum distance equal to two-thirds the height of the tower.

B. Ground cover for a standpipe or grain storage bin shall extend from the base a minimum distance equal to one-half the height of the structure.

C. Ground cover for a ground storage tank shall extend from the base a minimum distance equal to 20 feet, or to the height of the tank, whichever is greater.

The owner or contractor shall increase the width of the ground cover with distance from the base of the structure so that it is equal to an area within an angle of 120 degrees from the center of the structure, except that the width of the ground cover shall always be greater than the width of the downwind curtain.

Subp. 5. Windspeed limitation. The owner or contractor shall not conduct paint removal whenever windspeeds render the curtains and ground cover ineffective in containing particulate matter. If visible emissions of particulate matter occur in the air, or visible deposits occur on the ground, at a distance from the structure greater than the distance of the ground cover, then the owner or contractor shall:

A. add additional ground cover, in the manner required in subpart 4, to a distance greater than the distance of visible particle transport or deposition;

B. use additional curtains to prevent the dispersal of visible particles to a distance beyond the ground cover; or

C. use a method of removal from part 7025.0340 or 7025.0350, instead of dry abrasive blasting to remove the lead paint.

Subp. 6. Cleanup of waste material. The owner or contractor shall clean up all visible deposits of waste material containing paint or paint particles at the end of each workday and remove this material from the site or store it in containers or on top of ground cover and covered with impermeable tarpaulins. The owner or contractor shall recover this material by manual means or by vacuum, but may not use an air pressure or water stream which redistributes the waste material. Methods of handling and movement of waste material shall prevent fugitive dust and other loss of any material until final disposition of the material.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0340 CLASS II STORAGE STRUCTURE.

Subpart 1. Application. An owner or contractor who removes lead paint from a storage structure that requires class II pollution control shall use a method of removal and containment in this part or in part 7025.0350 as minimum pollution control.

Subp. 2. Wet abrasive blasting. If wet abrasive blasting is used to remove lead paint, the owner or contractor shall use the methods required in part 7025.0330, subparts 2 to 6, except curtains used must be rated by the manufacturer at not less than 85 percent impermeable. The owner or contractor shall use an amount of water such that dispersal of particulate matter is suppressed without loss of waste material from the ground cover by runoff.

Subp. 3. Power tools and hand tools. If power tools or hand tools are used to remove lead paint, the owner or contractor shall:

A. use the methods required in part 7025.0330, subparts 2 to 6, except that if power tools or hand tools are used on ground storage tanks only, then the use of curtains is not required; and

B. remove all lead paint with power tools or hand tools.

Subp. 4. Dry abrasive blasting within total enclosure. If dry abrasive blasting within a total enclosure is used to remove lead paint, the owner or contractor shall use the methods required in part 7025.0330, subparts 2 to 6, except that the owner or contractor shall totally enclose the structure with impermeable materials during lead paint removal from all parts of the steel structure, including the top surfaces.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202; 23 SR 2224*

7025.0350 CLASS III STORAGE STRUCTURE.

Subpart 1. **Application.** An owner or contractor who removes lead paint from a storage structure that requires class III pollution control shall use a method of removal and containment in this part as minimum pollution control.

Subp. 2. **Vacuum blasting.** If vacuum blasting is used to remove lead paint, the owner or contractor shall use the ground cover and cleanup methods required in part 7025.0330, subparts 4 and 6. The owner or contractor may use vacuum blasting without the use of curtains if:

A. the owner or contractor holds the workhead of the vacuum blasting unit at all times against the substrate during paint removal; and

B. all parts of the vacuum blasting equipment are in a condition that prevents emissions of particulate matter.

If the owner or contractor cannot maintain complete contact between the workhead and the coated surface at all times, then the curtains and the windspeed limitation required in part 7025.0330, subparts 2 and 5, shall be used.

Subp. 3. **Dry abrasive blasting within modular enclosure with negative air pressure.** If dry abrasive blasting inside a modular enclosure is used to remove lead paint, the owner or contractor shall use the cleanup method required in part 7025.0330, subpart 6, and shall:

A. construct an enclosure of impermeable material to totally contain the area of paint removal and to transport waste material to the ground;

B. maintain the enclosure at less-than-atmospheric air pressure during abrasive blasting by use of a dust collector with filtration of exhaust air to eliminate dust emissions;

C. use impermeable ground cover beneath the area of paint removal to a minimum distance from the base equal to one-half the height of the structure; and

D. use either a recyclable or nonrecyclable abrasive, but a recyclable abrasive must be cleaned to remove nonabrasive material before it is reused.

Subp. 4. **Wet abrasive blasting in total enclosure.** If wet abrasive blasting in total enclosure is used to remove lead paint, the owner or contractor shall use the ground cover, windspeed limitation, and cleanup methods required in part 7025.0330, subparts 4 to 6, and shall:

A. totally enclose the structure with material rated by the manufacturer at not less than 85 percent impermeable during paint removal from all parts of the structure, including the top surfaces and if dry abrasive blasting is used for surface preparation; and

B. use an amount of water such that dispersal of particulate matter is suppressed without loss of waste material from the ground cover by runoff.

Subp. 5. **Chemical stripping.** If chemical stripping is used to remove lead paint, the owner or contractor shall use the ground cover, windspeed limitation, and cleanup methods required in part 7025.0330, subparts 4 to 6, and shall:

A. extend the ground cover beneath the area of paint removal and raise the outside edges to prevent runoff;

B. use wide-blade scrapers and low-volume high-pressure water spray applied within a distance of one foot to remove all coatings; and

C. remove all lead paint with chemical stripping.

Subp. 6. **Power tools with vacuum recovery.** If power tools that are equipped with HEPA filter vacuums are used to remove lead paint, the owner or contractor shall:

A. use the methods required in part 7025.0330, subparts 2 and 4 to 6, except that if all parts of the vacuum equipment are in a condition that prevents emissions of particulate matter, then the use of curtains is not required; and

B. remove all lead paint with power tools with vacuum recovery.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

**CONDITIONS FOR LEAD PAINT REMOVAL
FROM OTHER STEEL STRUCTURES****7025.0360 POLLUTION CONTROL REQUIRED.**

An owner or contractor who removes lead paint from the exterior surface of a steel structure that is not included in parts 7025.0260 to 7025.0300 and 7025.0320 to 7025.0350 shall use the methods required in part 7025.0370, except that paint removal conducted only for the purpose of coatings analysis is exempt. These structures include, but are not limited to, railcars, pipelines, boats and barges, transmission towers, transformers, light poles, exterior metal components of buildings, parking ramps, handrails, and vehicles that are used for commerce, industry, or construction. Paint removal from any other vehicle by the vehicle owner who does not act as a contractor, and who is not a licensed vehicle dealer, is exempt.

The owner or contractor may apply a method of paint removal and containment of any class of bridge in parts 7025.0260 to 7025.0300, or any class of storage structure in parts 7025.0320 to 7025.0350 if:

A. lead paint is removed from a total surface area less than 200 square feet on one or more structures at one location in one calendar year; or

B. the risk factor (RF) calculation for the steel structure or structures is less than 1.0 and the structure is not within 300 feet of group A properties or 200 feet of group B properties in part 7025.0310, subparts 2 and 3.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0370 LEAD PAINT REMOVAL REQUIREMENTS.

If lead paint is removed from a steel structure that is neither a bridge nor a storage structure, the owner or contractor shall:

A. apply a method of removal and containment according to parts 7025.0310 to 7025.0350, as if the structure were a storage structure;

B. if the steel structure is mobile, portable, or disassembled, conduct paint removal inside a building or an enclosed structure; or

C. if the steel structure traverses a water body or is in or above a water body, apply a method of removal and containment according to parts 7025.0250, 7025.0260, and either 7025.0280 or 7025.0300, as if the structure were a bridge or bridge portion.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*

7025.0380 RESTRICTIONS.

Subpart 1. **Testing and disposal of waste materials.** The owner or contractor shall evaluate and dispose of waste materials that contain lead paint or lead paint particles generated by the removal of lead paint from steel structures as required by either chapter 7035, solid waste rules, or 7045, hazardous waste rules, whichever applies.

Subp. 2. **Use of lead paint.** An owner or contractor shall not apply paint that contains more than one-half of one percent (0.5 percent) total lead by weight in the dried film to the exterior surface of any new steel structure or of any steel structure that is repainted, except by written permission of the commissioner.

Subp. 3. **Water blasting.** An owner or contractor shall not use high pressure water with or without abrasives to remove lead paint from a steel structure unless the water and paint particles are contained and recovered.

Subp. 4. **Identification of contractor.** The contractor shall post its name and telephone number in letters and numbers at least four inches high on a vehicle or on a sign at the property from the beginning of lead paint removal until completion of the contractor's work on the structure or structures.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202*